REMARKS

In response to the Office Action dated 26 November 2003, the applicant requests reconsideration of the above-identified application in view of the following remarks. Claims 1-30 are pending in the application, and are rejected. Claims 20 and 22 will be amended upon entry of the present amendment.

Claims 20 and 22

Claims 20 and 22 were voluntarily amended solely to correct antecedent basis problems, and not in response to any rejection of the claims.

Rejections of Claims Under §102

Claim 28 was rejected under 35 USC § 102(b) as being anticipated by Oprescu et al. (U.S. 5,325,355, Oprescu). The applicant respectfully traverses.

Claim 28 recites a method of synchronizing an agent to a bidirectional bus comprising de-asserting a ready signal to drive a transmission line having a second agent driver present thereon to signify the agent is not ready to communicate on the bidirectional bus, asserting the ready signal to signify the agent is ready to communicate on the bidirectional bus, and monitoring the transmission line for an indication that both the agent and the second agent are ready to communicate on the bidirectional bus.

Oprescu relates to a bus system shown in Figure 1 including a first node 51 coupled to a second node 52 by a serial bus 45 including "two pairs of signal wires 40,41 and 42,43 with each pair forming a transmission channel 20 for the transmission of differential signals." Oprescu col. 5, lines 24-33. Oprescu shows transmitting data in a data transfer phase and transmitting arbitration information in an arbitration phase. Oprescu, col. 5, lines 24-48. The Office Action indicated that the features recited in claim 28 were in Oprescu, col. 5, lines 10-47, col. 6, lines 37-65, and col. 6, line 65 to col. 7, line 59. The applicant respectfully submits that the claimed features of "de-asserting a ready signal" and "asserting the ready signal to signify the agent is ready to communicate" are not found in Oprescu. The text of Oprescu cited in the Office Action describes the use of three signal states (0, 1, and Z) to

enable duplex transmission of control signals. The transmission of data and arbitration information is not described as being related to a "ready signal" in Oprescu.

The applicant respectfully submits that the features of claim 28 are not shown by Oprescu, and that claim 28 is in condition for allowance.

Rejections of Claims Under §103

Claims 1, 4, 8-11, 14-18, 20-24, 26 and 30 were rejected under 35 USC § 103(a) as being unpatentable over Oprescu in view of Lipp (U.S. 5,347,177). The applicant respectfully traverses.

Representative of the rejected claims 1, 4, 9, 11, 14, 16, 20, 23-24, 26 and 30, claim 1 recites an integrated circuit comprising a driver having an output node to be coupled to a conductor external to the integrated circuit, such that the driver launches an initial voltage value on the conductor when the driver changes state, and a receiver having input hysteresis, the receiver including an input node coupled to the output node of the driver, the input hysteresis having a threshold set such that the initial voltage value does not change an output state of the receiver.

The first node 51 of Oprescu includes a differential driver 4 and a binary receiver 5 having two inputs coupled to the differential output of the differential driver 4. Oprescu, Figure 1 and col. 5, line 66 to column 6, line 11.

Lipp shows a receiver 24a in Figure 3. The "receiver 24a has a primary input 28 whose threshold level is controlled by a second input 25, which is connected to a system clock signal (designated "SYSCK") on lead 31." The receiver 24a has a hysteresis characteristic. Lipp, col. 6, lines 37-61.

The MPEP states the following with regard to rejections under 35 USC § 103:

> "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. " MPEP 2143.

> "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP 2143.01.

The suggestion or motivation to combine references and the reasonable expectation of success must both be found in the prior art. MPEP 2143.

The Office Action proposes to substitute the receiver 24a of Lipp for the binary receiver 5 of Oprescu, but the receiver 24a of Lipp does not have inputs to receive a differential signal, and therefore such a modification would require a change in the principle of operation of Oprescu. The proposed combination of Oprescu and Lipp is not sufficient to render claims 1, 4, 8-11, 14-18, 20-24, 26 and 30 *prima facie* obvious. MPEP 2143.01.

Representative of the rejected claims 8 and 21, claim 8 recites the integrated circuit of claim 1 further including an initialization circuit to drive an input node of the driver low during initialization. The Office Action cites Oprescu, col. 6, lines 12-36, as showing an initialization circuit. The applicant respectfully submits that Oprescu does not show an initialization circuit.

Representative of the rejected claims 10 and 15, claim 10 recites the integrated circuit of claim 9 further comprising, among other elements, a simultaneous bidirectional port including at least one initialization circuit. The applicant again respectfully submits that Oprescu does not show an initialization circuit.

Representative of the rejected claims 12, 17-18, and 22, claim 12 recites the integrated circuit of claim 10 wherein the at least one initialization circuit includes an output slew rate control circuit. The Office Action cites Oprescu, col. 14, lines 14-43, as showing a slew rate control circuit. The applicant respectfully submits that Oprescu does not show a slew rate control circuit.

The applicant respectfully submits that a *prima facie* case of obviousness has not been established for claims 1, 4, 8-11, 14-18, 20-24, 26 and 30, and that claims 1, 4, 8-11, 14-18, 20-24, 26 and 30 are in condition for allowance.

Claims 2, 3, 5-7, 10, 13, 19, 27 and 29 were also rejected under 35 USC § 103(a) as being unpatentable over Oprescu in view of Lipp and further in view of Klein (U.S. 6,040,714). The applicant respectfully traverses.

Klein issued on 21 March 2000, which is less than one year before the 23 August 2000 filing date of the present application. The applicant does not admit that Klein is prior art, and reserves the right to swear behind Klein at a later date.

Representative of the rejected claims 2, 3, 19, and 29, claim 2 recites the integrated circuit of claim 1 wherein the driver comprises a pullup transistor having an output impedance, and a pulldown transistor having an output impedance, the output impedance of the pullup transistor being greater than the output impedance of the pulldown transistor.

Klein relates to a method for providing two modes of I/O pad termination. The Office Action cited Klein, col. 3, line 62 through col. 4, line 10, in which Klein discusses a pullup transistor and a pulldown transistor. However, Klein does not discuss the output impedance of either the pullup transistor or the pulldown transistor. Therefore, even as combined, Oprescu, Lipp, and Klein do not show all of the claimed elements.

Representative of the rejected claims 5, 7, 13, and 27, claim 5 recites the integrated circuit of claim 4 wherein the integrated circuit is a circuit type from the group comprising a processor, a processor peripheral, a memory, and a memory controller. The Office Action states that "one skilled in the art would have understood that they can choose to implement the design into variety of type of circuits to fulfill their need." Office Action, page 5. The applicant respectfully submits that the Office Action has not found this suggestion for modifying the combination of Oprescu, Lipp, and Klein in the prior art as is required by MPEP 2143.

Claim 6 recites, among other elements, the integrated circuit of claim 1 wherein the driver includes an input node, and the receiver includes an output node, the integrated circuit further comprising a processor coupled to the input node of the driver and to the output node of the receiver, the processor being configured to assert a ready signal on the input node of the driver.

The Office Action cited Klein, col. 2, line 47 through col. 3, line 13 in which a microprocessor is mentioned, but none of Oprescu, Lipp, and Klein describe a ready signal as

is recited in claim 6. Therefore, even as combined, the applicant respectfully submits that Oprescu, Lipp, and Klein do not show all of the elements recited in claim 6.

The applicant respectfully submits that a *prima facie* case of obviousness has not been established for claims 2, 3, 5-7, 10, 13, 19, 27 and 29, and that claims 2, 3, 5-7, 10, 13, 19, 27 and 29 are in condition for allowance.

CONCLUSION

The applicant respectfully submits that all of the pending claims are in condition for allowance, and such action is earnestly solicited. The Examiner is invited to telephone the below-signed attorney at 612-373-6973 to discuss any questions which may remain with respect to the present application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26 day of February, 2004.

KACIA LEE _____ Kacia Lee

Name Signature